

**SANTA BARBARA COUNTY
AIR POLLUTION CONTROL DISTRICT
POLICIES AND PROCEDURES**

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1.0 APPLICABILITY

This Policy and Procedure applies to all Best Available Control Technology (“BACT”) determinations required by APCD Rules and Regulations, the APCD Hearing Board, CEQA or permits issued by other agencies in which APCD-approved BACT is a stated requirement.

Policies and Procedures Memoranda are intended to provide agency staff, applicants and the public guidance relative to standardized District procedures. These policies and procedures shall not be interpreted in conflict with District Rules and Regulations or administrative policies, and may be modified or updated periodically without advance notice.

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2.0 **INTRODUCTION**

This policy and procedure (“P&P”) provides guidance on the meaning, application and tracking of Best Available Control Technology (“BACT”). It was compiled based on past APCD practices, the current APCD New Source Review (“NSR”) rule, USEPA regulations and policies and CARB documents. Any questions regarding this P&P should be directed to the NSR Supervising Engineer.

3.0 **DEFINITIONS**

- 3.1 **NAR Best Available Control Technology** For nonattainment review (“NAR”), the APCD’s definition of BACT in Rule 802.C.2 is used. This definition is typically referred to as California BACT and is similar to the USEPA’s definition of Lowest Achievable Emission Rate (“LAER”).

For any stationary source the more stringent of:

- a) *The most effective emission control device, emission limit, or technique which has been achieved in practice for the type of equipment comprising such stationary source; or*
- b) *The most stringent limitation contained in any State Implementation Plan; or*
- c) *Any other emission control device or technique determined after public hearing to be technologically feasible and costeffective by the Control Officer.*

- 3.2 **PSD Best Available Control Technology** For attainment review under the Prevention of Significant Deterioration (“PSD”) rules, BACT must be consistent with the Federal definition of BACT as found in Section 21 of 40 CFR 52. For the purposes of PSD BACT determinations, the following definition from Rule 803.D.2 shall be used:

BACT shall be an emission limitation based on the maximum degree of reduction for each pollutant which would be emitted from any new or modified stationary source, which on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of Best Available Control Technology result in emissions which would exceed the emissions allowed under the applicable New Source Standards of Performance.

4.0 **BACT THRESHOLDS**

BACT is not required for every permit application. Each application must be reviewed to determine whether the applicable BACT threshold is exceeded. This process can range from being easy and straightforward to complex and time-consuming. To utilize the New Source Review (“NSR”) rule one must understand the concepts of Potential to Emit (“PTE”) and the Net Emissions Increase (“NEI”) calculation. If the applicable NAR or PSD BACT threshold is exceeded, the applicant

is required to propose and commit to implementation of BACT as part of their project application.

The criteria pollutant thresholds for BACT are:

NAR BACT: 25 pounds per day PTE¹ (150 lb/day for CO)

PSD BACT: 120 pounds per day NEI¹ (550 lb/day for CO;
80 lb/day for PM-10)

5.0 **DISTINCTIONS BETWEEN NAR BACT AND PSD BACT**

There are several notable differences between NAR BACT and PSD BACT. Most importantly, PSD BACT is evaluated on a case-by-case basis, where NAR BACT is essentially uniform for the class or category of source. The PSD case-by-case evaluation has a large scope of concerns, including energy, environmental, and economic impacts. The NAR BACT definition is more narrow, allowing little discretion in the decision other than what is "achieved in practice" and what is the class or category of source (i.e., the type of equipment comprising such stationary source). As a result, similar sources may have different PSD BACT requirements, but should not, in practice, have different NAR BACT requirements.

The PSD BACT definition is very clear in its intent to consider requirements of each source on a case-by-case basis. The decision must include economic, energy, and environmental considerations. In contrast, the "achieved-in-practice" component (part a; see 3.1 above) of the NAR BACT definition is clearly more objective by not allowing economic, energy, or environmental consideration, and only considering the most stringent control achieved in practice for the category of source being considered. Thus, no discussion of costs is necessary or appropriate for such class or category of sources that are already using a level of control considered achieved-in-practice. This is different from the PSD BACT definition, for which the economic feasibility of a control technology is a required consideration. The "technologically feasible" component (part b) of the NAR BACT definition, however, does consider economics in the analysis along with an analysis of whether the technology in question is feasible for the class or category of source subject to review. The fact that a particular control technology is "achieved-in-practice" argues for its inherent economic and technological feasibility.

5.1 *Specifics of the NAR BACT Definition*

- (a) **Most Effective Control Achieved-in-Practice** There are three important elements to this part of the definition. The first element refers to *the most effective control device, technique, or emission limit*. This element is defined in a broad fashion to allow for the appropriate selection criteria for the specific equipment or process in question. Examples include:
- concentration limits of 20 ppmv NO_x from the stack of a small boiler using a low-NO_x burner
 - mass destruction rate efficiency of 98.5 percent for a recuperative thermal oxidizer
 - selective catalytic reduction with a concentration limit of 6 ppmv NO_x for a 10 MW gas turbine.

The second element is achieved-in-practice. This element indicates that the technology has a proven "track-record" of reliability. For example, if low-NOx diesel IC engines meeting a 5.0g/bhp-hr emission limit at Facility X have been in place and operating for a reasonable period of time, then if a similar Facility Z (in our jurisdiction) triggers BACT, a low-NOx diesel IC engine meeting the same 5.0 g/bhp-hp emission limit should be identified as the applicable BACT. Facility X could be located anywhere in the USA.

The third element of the definition refers to the type of equipment comprising the stationary source (i.e., class or category of source) and could be as large as a group of basic equipment units that provide the same function (e.g., the combination of motors, turbines, or reciprocating engines to provide torsional drive). On the other hand, it could be a more specific size segment or subtype within an equipment type (e.g., boilers over 33MMBtu/hr heat input, or lean-burn engines).

Provisions for consideration of alternative basic equipment or fuels are not evident in the definition. But neither does the language of the definition preclude the consideration of alternative basic equipment or fuels as a NAR BACT requirement.

- (b) Other Emissions Control Devices or Techniques Deemed Technologically Feasible and Cost-Effective This part of the definition allows the district to require unproven control technologies not yet considered as "achieved-in-practice" as BACT, and is known as "technology forcing" BACT or "TFBACT." This option makes the NAR BACT definition more stringent than the federal LAER definition. Because of it, California districts can participate in advancing the stringency of "California BACT" by requiring unproven control technologies. The process requires a public hearing. The hearing may be held at the APCD's offices under the direction of the NSR Supervising Engineer. Cost effectiveness is a consideration with this option. Use of this option may not result in a BACT that is less effective than that achieved in practice or than that required by local, state or federal laws or regulations. The provision in the definition stating that "...unless the applicant demonstrates to the satisfaction of the Air Pollution Control Officer that such limitations are not achievable..." may not be interpreted as allowing a source to propose a level of BACT that is less stringent than what is considered as "achieved-in-practice" under item 5.1(a) above or less stringent than any applicable local, state or federal law (e.g., RACT or NSPS).

As discussed above, the NAR BACT definition has two alternative minimum requirements, with the most stringent for the particular circumstance being required. In any case, BACT (NAR or PSD) cannot be less stringent than federal new source performance standards (NSPS) or national emission standards for hazardous air pollutants (NESHAPS).

5.2 *Specifics of the PSD BACT Definition*

PSD BACT may be less stringent than NAR BACT, and allows for consideration of "energy, environmental, and economic impacts and other costs." It also requires evaluation of alternative production processes and available methods, systems, and

techniques, including fuel cleaning or treatment or innovative fuel combustion techniques.

The complexity of so many considerations in the PSD BACT determination creates ambiguity regarding the implied procedure for determining BACT requirements. As a result, USEPA has provided guidance on the matter. This guidance is referred to as "The Top-Down Approach", and is neither applicable to LAER nor to NAR BACT definitions patterned after LAER; it is only used for PSD BACT determinations. The guidance essentially dictates that the process of evaluation should include a ranking of candidate PSD BACT requirements, starting with evaluation of the most stringent candidate requirement with subsequent evaluations to cover sequentially less stringent requirements. One cannot proceed down the list to a less stringent PSD BACT candidate before justifying the rejection of a more stringent candidate which is considered feasible. The applicant is required to prepare and submit the "Top-Down" BACT analysis with their application.

Pursuant to the USEPA's "Top-Down" PSD BACT policy guidelines, any PSD BACT determination analysis starts with assessing whether the applicant has proposed LAER (NAR BACT) equivalent limits. If NAR BACT equivalent limits are proposed, then no further justification of proposed emission limits (as PSD BACT) are necessary. However, if a less stringent limit is contemplated by the applicant, then all possible controls, including NAR BACT, must be listed in the Top-Down BACT Analysis submitted with the application. Each alternate is subsequently evaluated for effectiveness to demonstrate the proposed control as the best feasible PSD BACT for the situation under study.

The determination of PSD BACT may be based on the extent of controls for other pollutants. A PSD BACT analysis should involve all pollutants, including affected pollutants influenced by the control technique selected. Under Federal policy decision (PSD Appeal No. 85-2: North County Resource Recovery Associates Application Decision, Dated Sept. 4, 1986), if two equivalent emission control technologies are analyzed in an ATC for a particular pollutant, then the one more effective for all other regulated pollutants should be preferred as BACT, even though it may be costlier. For example, of two proposed control technologies that result in identical NO_x emissions, the technology that results in lesser ROC or CO emissions is to be preferred as PSD BACT.

Another notable characteristic of the PSD BACT definition is the direct authorization to consider alternative production processes and available methods, systems and techniques, including fuel cleaning. As a result of this provision, PSD BACT is not limited to add-on control technology. Even changes in basic equipment, fuels, and material substitutes can be considered.

6.0 BACT SELECTION PROCESS

It is the responsibility of the applicant to propose the BACT for their project. Many times, however, the applicant does not have knowledge of these aspects of air pollution control, and the APCD is frequently requested to provide detailed technical assistance in helping the applicant ascertain what the appropriate BACT should be. If the BACT threshold has been exceeded, the applicant is required to include a BACT analysis in their application. In such an

¹ USEPA New Source Review Workshop Manual, Chapter B (BACT), October 1990 Draft

analysis, the applicant may be required to conduct a survey to determine what methods, measures, or control technologies are available for control of emissions. In some cases, alternative basic equipment, processes, and fuels must be considered in addition to emission control technologies and standards. The analysis must also include a justification of the applicant's proposed BACT.

As stated in section 5.2, the PSD applicants are required to prepare and submit the Top-Down analysis with their application. PSD applications which fail to contain a Top-Down analysis shall be handled in such a manner that the "achieved-in-practice" part of the NAR BACT definition will be used by the APCD in processing the application.

To research what the appropriate BACT is for a specific project, a number of references are available. Please note that no one document or source of information is absolute. Further, there may be cases where either no existing BACT is found to match the project at hand, or where APCD staff or the public feel the technology-forcing control is both feasible and cost-effective. The following BACT references are available:

1. Santa Barbara County APCD BACT Database This database tracks all BACT (NAR and PSD) determinations in Santa Barbara County. The database follows the CAPCOA naming and categorization system. The database also contains "standard" BACT determinations for equipment commonly used in the County. The APCD BACT Database will be accessible via our Internet web site (<http://www.apcd.santa-barbara.ca.us/~apcd/eng/nsr/nsr.htm>).
2. Bay Area AQMD BACT/TBACT Workbook This Workbook provides a listing of BACT determinations for commonly used equipment in the San Francisco Bay Area. The Workbook follows the CAPCOA naming and categorization system. No on-line version exists at this time.
3. CAPCOA/ARB BACT-LAER Clearinghouse This is a database maintained by the ARB and is designed to track all BACT-LAER determinations made in the State. Access to the database is available on-line via the Internet (<http://arbis.arb.ca.gov/html/bact.htm>). Hard copy reports are also typically sent out once per quarter to the APCD. The Clearinghouse follows the CAPCOA naming and categorization system. The Clearinghouse should be used with caution as many of the districts do not report their BACT/LAER determinations to the ARB. As a result, the Clearinghouse data is neither complete or current.
4. USEPA RACT/LAER/BACT Clearinghouse (RLBC) This is a nationwide database maintained by the USEPA. The Clearinghouse does not utilize the CAPCOA naming conventions and may be somewhat difficult to use. All BACT determinations sent to the ARB are forwarded to the USEPA for inclusion in the RLB Clearinghouse. The quality the USEPA's RLB Clearinghouse is affected by the fact that many California districts do not forward their BACT/LAER determinations to the ARB. The user should remember at federal BACT is considered as PSD BACT and that LAER is NAR BACT. Access to the RLB Clearinghouse can be made via the Internet to the USEPA's Technology Transfer Network2000 (<http://ttnwww.rtpnc.epa.gov>).
5. South Coast AQMD BACT Guidelines The SCAQMD BACT Guidelines document is a listing of BACT standards for that region. The Guidelines follow the CAPCOA naming and categorization system. The Guidelines document is not frequently updated and a number of the BACT listings are out of date. No on-line version exists at this time.

6. San Joaquin Valley Unified APCD BACT Clearinghouse The SJVUAPCD BACT Clearinghouse document is a listing of BACT standards for their region. The Guidelines do not follow the CAPCOA naming and categorization system. The document is updated every quarter. No on-line version exists at this time.
7. Manufacturer Information Quite often manufacturers of air pollution control or emitting equipment are a good sources of information on BACT. They can provide examples of where their equipment was used for projects that required BACT. Caution should be used, however, since a manufacturer may sometimes confuse an “emissions guarantee” with a BACT “performance specification.” In addition, other outside factors may influence the manufacturer’s statements which should, therefore, be reviewed in the appropriate context.

It is important that the agency/source of the BACT determination be contacted to ascertain specific details with regards to the BACT determination in question. That agency/source should be questioned as to the type of facilities subject to the BACT, whether any special operating circumstances exist and if the permit(s) contain any specific operational limits that ensure continuous and constant compliance.

7.0 SMALL SOURCE BACT

In order to streamline the BACT process for small sources, the APCD has developed a Small Source BACT list for commonly found mass-produced equipment. Sources which propose the use of equipment on this list need not provide a completed APCD Form-020 (BACT Analysis Summary Form) with their permit application. Examples of small sources that are included on the Small Source BACT List are gasoline stations and dry cleaners. The Engineering BACT Team will maintain and update the Small Source BACT List as needed.

8.0 BACT AND THE PERMIT PROCESS

A number of issues must be addressed when evaluating BACT for specific permit applications. The District uses the following procedures to incorporate BACT measures into permits:

8.1 *BACT must be enforceable over all operating ranges*

The permitting process must ensure that the selected BACT is effective over all operating ranges. BACT that is selected based on full load operation should not neglect operations at loads that are likely to occur during the life of the equipment. This criterion is fulfilled through specification of a BACT “performance standard” and is not achieved solely through the specification of the BACT control technology being employed. This performance standard must be in units that take into consideration different operating loads and must be practicably enforceable. For example, a BACT performance standard for a boiler could be defined as an emission limit of 20ppmvd NO_x at 3 percent O₂. Acceptable performance standard emission limits include but are not limited to:

- concentration limits (ppmvd at 3 or 15 percent O₂)
- pounds pollutant per MMBtu heat input
- grains particulate per dscf at 12 percent CO
- destruction rate efficiency (mass basis) using inlet and outlet values
- mass removal efficiency (percentage) using inlet and outlet values

- percent opacity

An equivalent emissions ceiling (or cap) in the units of “lb/hour” must also be proposed for each emission unit subject to BACT to protect air quality standards and increments. However, the use of mass emission rates (e.g., pounds per day) should not be used as a performance standard emission limit. These levels reflect only maximum reasonable worst case operating scenarios. Use of mass emission limits alone can defeat the purpose of BACT to be effective over all operating ranges. For example, a source with an assumed BACT performance standard of 90 percent mass reduction efficiency is permitted at 7 pounds per hour (maximum load). Also assume that the emissions unit operates on average at a 40 percent load. Setting BACT at a mass emission rate of 7 pounds per hour in lieu of the emission limitation of 90 percent efficiency would always allow the source to emit at 7 pounds per hour. Thus, the effect, in this example, would be to reduce the allowed effectiveness of the control device from 90 percent down to 75 percent.

8.2 *BACT During Non-Standard Operations*

There are some non-standard operating situations that will not lend themselves to adherence to the BACT performance standards identified for normal operating loads. Typical examples of these operations include: transient operations such as equipment startup and shutdown; minimum equipment/processing loads such as sulfur recovery plants. When submitting a permit application, the applicant must provide an analysis of any operation which may not comply with the BACT performance standard(s), and must propose an alternative BACT performance standard for these non-standard periods for inclusion in the permit.

8.3 *CEMS and BACT*

Continuous Emissions Monitoring Systems (“CEMS”) may be required pursuant to the NSR process, or by New Source Performance Standards or APCD Rule 28 (*Continuous Emission Monitoring*). Typical sources that require CEMS are:

- Gas Turbines
- Boiler/Steam Generators/Process heaters with a rated heat input greater than 100 MMBtu/hr
- Sulfur Recovery Plants
- Other large and/or complex sources where continual documentation of the source’s compliance status with emission standards is necessary.

All determinations to require CEMS must be reviewed by the NSR Supervising Engineer as well as by the Source Testing Group. Compliance averaging times should be detailed in the CEMS and/or BACT permit conditions.

8.4 *Source Testing and BACT*

Source Testing is required to ensure that the BACT performance standards and hourly mass emission rates are in compliance. For certain BACT decisions, source testing is not applicable and other means of compliance may be used. Examples of BACT which do not require source testing include:

- (a) Gas stations with Phase I and II vapor recovery which only require control-specific performance tests observed by inspectors during the SCDP,

- (b) Sources with an approved fugitive hydrocarbon Inspection and Maintenance (“I&M”) program,
- (c) Low VOC coatings. Laboratory analysis for VOC content may be required. Unless otherwise approved by the NSR Supervising Engineer, all permits that require BACT should also have a source testing requirement. Source testing for BACT During Non-Standard Operations (see Section 8.2) shall be determined on a case-by-case basis. The permit engineer should refer to P&P 6100.039.93 *Permit Requirements for Source Tests* for a more complete description of the source test and permitting relationship.

8.5 *BACT Operating Constraints*

For sources which use a control device with associated operating constraints, compliance must be verified over a range of operating conditions during SCDP. At a minimum, the operating extremes of the design operating window should be tested, and any alternative BACT performance standard for non-standard operations shall be demonstrated via testing. For example, if a facility uses SCR and water injection for NO_x control, compliance with emission limits should be verified over the proposed operating range of NH₃/NO_{x,in} injection ratios and water/fuel injection ratios. Emissions in the non-standard operating range shall meet the alternative performance standard requirements. If compliance is not verified over the BACT design operating range, the source shall be limited to operations most protective of air quality. This limitation shall be reflected in the BACT permit condition of the PTO. For example, if a manufacturer specifies a water/fuel ratio range of 0.8 to 1.0, but the source test only verifies compliance at ratios of 0.9 and 1.0, then subsequent operation must occur at a water/fuel injection ratio no less than 0.9 and no greater than 1.0.

Once a compliant operating range is defined during the SCDP, post-SCDP tests may be streamlined by testing only at the most stringent BACT operating condition. If streamlined test requirements are considered for post-SCDP testing, the full effect of BACT process parameters on emissions must be understood and reflected in the test requirements. These determinations will be made on a case-by-case basis.

8.6 *Modifications to Emission Units or Processes Previously Subject to BACT*

Once an emissions unit or process is subject to BACT, then any subsequent modifications to that emissions unit or process is subject to BACT. This also applies *de minimis* changes and equivalent replacements that may not require a permit. A few examples best clarify the intent of this section.

Example 1: A source using solvents in their process has previously installed a thermal oxidizer to control emissions due to flashing off of the solvent. BACT was triggered previously and a performance standard of 98.5percent control was established. If the source wishes to expand production that results in an increase of emissions of the controlled process, then those new emissions are subject to this existing BACT performance standard.

Example 2: An oil and gas processing line previously triggered BACT for fugitive hydrocarbon (“FHC”) emissions and implemented an APCD-approved Inspection and Maintenance Program along with low-emissions technology valves and connectors. If the source wishes to modify this processing line by adding new FHC components, then the new FHC components that are added are subject to BACT standards. If the addition *de minimis* pursuant to Rule 202, the BACT standards in the existing permit shall be implemented by the source. If the new FHC components are subject to the permit process and the applicable

NSR BACT threshold is not exceeded, then the BACT standards listed in the existing permit shall be implemented by the source. If the applicable NSR BACT threshold is exceeded, then a new BACT analysis is required.

8.7 *Engineering Evaluation and BACT*

It is very important to properly document how the BACT determination was made. The Engineering Evaluation is the place for this documentation. Attachment A (*Engineering Evaluation BACT Discussion List*) contains a checklist of items that should be discussed. The amount of detail will vary based on the complexity of the source and the type of equipment and operation being permitted. Where appropriate, BACT Table(s) shall be used in the permit to summarize the BACT determinations for the permit.

These tables must list both the technology and the performance standard. Standardized and boilerplate responses for small sources shall be used without deviation, unless such deviations are approved by the NSR Supervising Engineer. The BACT documentation should appear in both the ATC and PTO engineering evaluations.

8.8 *Permit Conditions and BACT*

If BACT is required, then the permit must have a BACT permit condition. Standard BACT permit condition language should be used as the basis for this condition; see Attachment B (*Standard BACT Permit Condition*) for example language. At a minimum, the condition should state what the required BACT technology and performance standards are for each BACT determination (if tables are used, the technology and the performance standard should be included in them). Also, the condition should both refer to the section of the permit that discusses the BACT in detail and incorporate that section as a part of the condition. The condition should also state that the specified BACT must be in place at all times of operation during the life of the project/permit.

Prescribed BACT limits must also be supplemented by permit conditions that require compliance monitoring, recordkeeping and reporting such that the source demonstrates continuous compliance with BACT. Surrogate emission monitoring (e.g., fuel use monitoring, mass of water injection into a gas turbine) may be considered as an alternate or supplemental compliance verification method in lieu of, or in combination with, Continuous Emissions Monitoring ("CEMS"). Specific monitoring, recordkeeping and reporting requirements are determined on a case-by-case basis.

8.9 *Multi-Year or Phase Projects*

For each phase of a multi-year, multi-phase project with significant time intervals between the phases, a reassessment of BACT may be necessary. The proposed ATC permit conditions should reflect this reassessment requirement. For example, the proposed ATC permit should state that a re-analysis for BACT must be performed at a specific time period prior to the beginning of construction for each phase of a multi-phase project if there is more than a one year interval between the end of one phase and the beginning of the next phase. It is the permit holder's responsibility for initiating the BACT re-analysis for each phase.

9.0 **BACT and RULE 331**

APCD Rule 331 (*Fugitive Hydrocarbon Inspection and Maintenance*) contains a provision that requires the installation of BACT for specific individual components that fail to meet certain

requirements of that rule. BACT required by Rule 331 is treated the same as if it were for a NSR application. The current attainment status for the pollutant (i.e., ROC) determines whether NAR or PSD BACT criteria are used.

10.0 DOCUMENTING BACT

All BACT determinations made at the APCD must be properly documented. This ensures a level of consistency among similar sources within the County. In addition, good documentation allows our database of knowledge to be accessible to industry, the public and to other agencies, both in and outside Santa Barbara County.

10.1 APCD BACT Database

All BACT determinations are to be tracked in a database. The permit engineer is responsible for submitting to the Engineering BACT Team ("EBT") a completed ARB/CAPCOA BACT Determination Reporting Form when the ATC permit is issued, and a BACT Implementation Reporting Form when the initial PTO is issued.

10.2 ARB and USEPA BACT/LAER Clearinghouse Forms

The permit engineer will ensure that the ARB/CAPCOA BACT Reporting Forms (Attachment "D") contain the necessary information and that the forms are forwarded to the EBT. The EBT will input the information from these forms in the APCD BACT database. The EBT will then forward these forms to the NSR Supervising Engineer for formal submittal to the ARB and USEPA.

10.3 Internet Webpage

The Engineering section of the APCD's Webpage will make available a listing of permit-specific BACT determinations. The Webpage will also list what BACT is for the more commonly used equipment. The EBT will be responsible for the BACT content of the Webpage.

11.0 THE ENGINEERING BACT TEAM PROCESS

11.1 Engineering BACT Team ("EBT") Composition

The EBT is comprised of two senior engineers and the NSR Supervising Engineer.

11.2 Responsibilities of the EBT

The EBT is responsible for the following:

- (a) Providing assistance to permit engineers with the review of new permit applications that trigger BACT.
- (b) Maintaining up to date lists and references related to BACT determinations, including the Small Source BACT list.
- (c) Maintaining the District's Database of BACT determinations.

- (d) Submitting BACT determinations to CARB/EPA.
- (e) Providing detailed technical assistance for PSD BACT and NAR TF BACT determinations. For those applications where a TF BACT Hearing is required, the EBT shall be responsible preparing for and setting up the Hearing along with assistance from the permit engineer.
- (f) Maintaining the BACT section on the APCD Webpage.

11.3 *Responsibilities of the Permit Engineer*

The permit engineer is responsible for the following:

- (a) Pre-application meetings for their project.
- (b) Initial Application Review. The permit engineer reviews the BACT aspects of the application for completeness performing the following:
 - Assess the NEI and PTE for the project and the source to determine the pollutants subject to review
 - Assess whether the application is for APCD listed Small Source BACT
 - Review all the *BACT Analysis Summary Forms* (APCD-02) for each process subject to BACT to ensure all information is provided
 - Review the application against the items listed in the Engineering Evaluation BACT Discussion List (Attachment A) to ensure adequate information is provided
 - Submit a copy of all *BACT Analysis Summary Forms* (APCD-02) for each process to the EBT. Obtain initial feedback from the EBT on whether the application should be deemed complete or if the BACT information is inadequate. Initial feedback on whether TF BACT should be considered can also be made at this point.
 - For TF BACT and PSD BACT, detailed EBT input must be obtained prior to making a completeness determination.
- (c) Permit Processing:
 - If NAR BACT review is triggered, the permit engineer compares the applicant-proposed BACT with that identified for the appropriate class or category of source in the District BACT Database. The permit engineer may also review other available databases (e.g., BAAQMD). The permit engineer may make a recommendation to the EBT based on this supplemental review. The permit engineer shall prepare a summary of the applicant's BACT proposal, utilizing the EBT Review Request Form (Attachment C), attach to this request form copies of the applicant-completed BACT Analysis Summary Form(s), proposed BACT related permit conditions and table(s), permit engineering evaluation and any other relevant information.
 - If the permit application is for a source category found on the Small Source BACT List, and the appropriate BACT is proposed, the permit engineer should complete

a EBT Review Request Form to document these findings. No further EBT review is required.

- For PSD BACT applications, the permit engineer should complete the EBT Review Request Form and include with it a copy of the applicant's PSD BACT Top-Down Analysis for EBT review - if included with the application. Applications for PSD BACT should be treated as AIP NAR BACT if no Top-Down Analysis was submitted.
- The permit engineer must include the EBT on the internal review list for all draft permits (the only exception is for Small Source BACT determinations)
- The permit engineer must keep the EBT informed of any applicant proposed changes in the proposed BACT or any applicant concerns. Copies of written correspondence regarding BACT shall be directed to the EBT for their review.
- Once the ATC permit is issued, the permit engineer shall submit a completed ARB/CAPCOA BACT Determination Reporting Form to the EBT.
- Once the PTO permit is issued, the permit engineer shall submit a completed ARB/CAPCOA BACT Implementation Reporting Form to the EBT.

11.4 *Scheduling*

The permit engineer must be reasonable in his/her expectations for a timely response from the EBT. Ideally, ten working days or more should be allowed for the more complicated issues, while a few days may suffice for the easier questions. The permit engineer is responsible for arranging meetings and/or telephone conferences that are specific to the project. The EBT reports to the NSR Supervising Engineer, who heads up the EBT. Scheduling and/or priority conflicts (e.g., time, technical) will be brought to the attention of the NSR Supervising Engineer.

12.0 **ABBREVIATIONS**

AIP	-	Achieved-in-Practice
NAR	-	Nonattainment Review
PSD	-	Prevention of Significant Deterioration
PTE	-	Potential to Emit
TF	-	Technology Forcing
NEI	-	Net Emissions Increase
RLBC	-	RACT, LAER, BACT Clearinghouse
EBT	-	Engineering BACT Team
LAER	-	Lowest Achievable Emission Rate

ATTACHMENTS

- Attachment A: Engineering Evaluation BACT Discussion List
- Attachment B: Standard BACT Permit Condition
- Attachment C: EBT BACT Review Request Form
- Attachment D: ARB/CAPCOA BACT Reporting Forms

